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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,716	02/06/2002	Naoki Iida	36856.608	4049

7590 04/23/2003

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EXAMINER

NGUYEN, PATRICIA T

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/066,716	Applicant(s) IIDA ET AL.	
	Examiner Patricia T. Nguyen	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3,5,7-13, 16, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Tam, U.S. Patent # 5,006,821.

Figs. 1A and 4 of Tam discloses a coupler comprising: In Fig. 4, coupling element 50 can be read as a main line; coupling element 54 can be read as a subline wherein self-inductance value of main line is smaller (larger line width) than self-inductance value of subline (smaller line width).

Regarding claims 10 and 20, see Fig. 1A.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 2, 6, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tam, U.S. Patent # 5,006,821 in view of Caragliano et al., U.S. Patent # 3,999,150.

Regarding claims 2 and 14, although Tam does not have a multilayered laminate body wherein the main line and subline are disposed on each layer are electrically connected to each other in series through via holes as claimed, Caragliano et al. teaches that way of connection (see spec. col. 8, lines 5-12).

Regarding claims 6 and 15, although Tam does not mention that the electrode thickness of the main line is 5um or more and a ratio of the electrode thickness of the main line to the subline is about 2:1, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to design the thickness as claimed in order to meet operational requirements since this is a matter of design choice.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagamori et al., U.S. Patent # 6,483,392 B2 in view of Caraglinao et al., U.S. Patent # 3,999,150.

Figs. 5 and 7 of Nagamori et al. discloses a directional coupler comprising: coupling line 11 can be read as a main line; coupling line 12 can be read as a subline.

Although Nagamori et al. does not have the main line in the common plane with the subline, Caraglinao et al. teaches that main line and subline of a directional coupler can be on the common plane (Fig. 4a) or on separate layers (planes) as in Figs. 6 and 6a (see spec. col. 6, line 10). Therefore, it would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to use the teaching of Caraglinao in the coupler of Nagamori et al.

Regarding claims 2 and 14, although Nagamori et al. does not have a multilayered laminate body wherein the main line and subline are disposed on each layer are electrically connected to each other in series through via holes as claimed, Caragliano et al. teaches that way of connection (see spec. col. 8, lines 5-12).

Regarding claims 6 and 15, although Nagamori et al. does not mention that the electrode thickness of the main line is 5um or more and a ratio of the electrode thickness of the main line to the subline is about 2:1, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to design the thickness as claimed in order to meet operational requirements since this is a matter of design choice.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents # 6,472,950 B1 of London and # 5,994,985 of Pehlke et al. contain some limitations of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia T. Nguyen whose telephone number is (703) 308-1927. The examiner can normally be reached on 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 305-0142 for regular communications and (703) 305-0142 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

PTN

April 11, 2003

PATRICIA NGUYEN
PRIMARY EXAMINER

Patricia Nguyen